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<p>69-128337/17 SKACHKO V P 06.06.86-SU-075113 (23.10.88) 801-31/10 C07c-51/09 C07c-53/02 Prod. of formic acid - by reacting acetic acid with methyl formate over catalyst comprising copolymer of tetrafluoro ethylene etc. C89-057050</p>	<p>A97 805 E17 SKAC/ 06.06.86 *SU 1432-048-A</p>	<p>B(10-C4E, 12-M6) E(10-C4J) N(5-E2) A(4-E9, 12-W11K, 4-E10D)</p>
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The formic acid is prepd. by reacting acetic acid with methyl formate in the presence of catalyst comprising copolymer of tetrafluoro-ethylene and perfluoro-3,6- dioxo-4-methyl-7-octene-sulphonic acid (1), of exchange capacity 0.7-1.2 mg-equiv./g, at 80-140 deg. C. Proposed perfluorinated sulphocationite (I) has M.Wt. 80000-125000. Tests show that the use of proposed catalyst increases yield of formic acid from 11 of reaction mixt. to 416.3-534.0 g/h and productivity (per 1 kg of catalyst) by 4.8 times, compared to the known method. Unreacted methyl formate and acetic acid are recycled to reactor.

USE/ADVANTAGE - Formic acid is widely used in the synthesis of pharmaceutical preparations, as preservative for fodders, in cellulose-paper industry and in etching of steels. Increased productivity owing to the use of new heterogenous catalyst. Bul.39/23.10.88 (5pp Dwg.No. 0/0)